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10/810,282	03/26/2004	Richard L. Parton	87152AEK	8579

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EXAMINER

YAMNITZKY, MARIE ROSE

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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03/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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1. This Office action is in response to Applicant's amendment filed November 30, 2007, which amends claims 15, 18 and 21, and in response to the Rule 132 Declaration filed November 30, 2007.

Claims 1-16, 18-25 and 28-33 are pending.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4, 6-11, 21, 22, 24, 25, 30, 32 and 33 stand rejected under 35 U.S.C. 102(e) as being anticipated by Matsuura et al. (US 2005/0064233 A1) for reasons of record in the Office action mailed April 26, 2007.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-16, 18-25, 30, 32 and 33 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuura et al. (US 2005/0064233 A1) for reasons of record in the Office action mailed April 26, 2007.

6. Claims 1-16, 18-25 and 28-33 stand rejected under 35 U.S.C. 103(a) via 102(a) as being unpatentable over Parton et al. (US 2003/0129449 A1) for reasons of record in the Office action mailed April 26, 2007.

The rejection under 35 U.S.C. 103(a) via 102(e) was previously overcome by the statement of common ownership set forth in applicant's arguments filed July 30, 2007. The rejection stands under 35 U.S.C. 103(a) via 102(a).

7. Applicant's arguments and the Rule 132 Declaration filed November 30, 2007 have been fully considered but they are not persuasive.

With respect to the rejections based on the patent application publication of Matsuura et al., applicant argues that Matsuura only teaches the use of the aryl amines in a light emitting layer and not in a hole transporting layer. With respect to applicant's comments in the third paragraph on page 9 of the amendment filed November 30, 2007 regarding the Office action dated April 26, applicant appears to have misinterpreted some statements in the rejection. As stated in the rejection under 35 U.S.C. 102(e) as set forth in the Office action mailed April 26, 2007, "the prior art compounds referenced above are capable of transporting holes (e.g. see paragraph [0093]), and a layer comprising such compounds will inherently be capable of

transporting holes.” This is not an argument regarding obviousness, this is an argument of inherency. A light emitting layer that is inherently capable of transporting holes meets the limitations of a hole transporting layer. While applicant emphasizes that the present claims require the naphthalene compound in a hole transport layer, and that Matsuura’s referenced compounds are used in the light emitting layer of Matsuura’s device, the examiner notes that the present claim language does not restrict the hole transport layer from providing another function in the device, and does not explicitly require a light emitting layer that is distinct from the hole transport layer.

With respect to applicant’s arguments regarding what is shown in the Rule 132 Declaration versus the Matsuura et al. reference, the examiner notes that the Rule 132 Declaration cannot be used to overcome the rejection under 35 U.S.C. 102(e). Regarding the rejection under 35 U.S.C. 103(a), the Rule 132 Declaration does not demonstrate unexpectedly superior results commensurate in scope with the rejected claims.

With respect to applicant’s arguments regarding the Rule 131 Declaration that was filed July 30, 2007 and previously considered by the examiner, Matsuura’s compounds are not necessarily used in a “totally different layer” since a single layer can provide both the function of light emission and the function of hole transportation. Matsuura discloses species within the scope of the present generic claims and some of the present narrower claims. Applicant has not shown prior possession of those species, and has not shown that those species would have been obvious in view of the species shown in the declaration. With respect to applicant’s arguments that the Declaration showing several species should be accepted as sufficient evidence of prior

discovery of applicant's generic invention over Matsuura's species, the examiner notes that the Rule 131 Declaration discloses only two species that are within the scope of some (not all) of the present claims, and they are not representative of all species within the scope of generic formula (1). The two compounds shown in the Rule 131 Declaration that are within the scope of generic formula (1) are compounds of formula (1) in which each of p and w is 1, and each of R¹ and R² is a t-butyl group. A t-butyl group is a sterically bulky substituent having a Sterimol B value of 2.59 angstroms (per page 5, Table A, of the specification). In contrast, the compound of formula (1) as required for the device of present claim 1 encompasses compounds in which the naphthalene ring is substituted with from one to six sterically bulky substituents, and in which each sterically bulky substituent may have a Sterimol B value as low as 1.6 angstroms (such as in Matsuura's EM192, which has two phenyl substituents, each with a Sterimol B value of 1.7 angstroms, on the naphthalene ring.) The two compounds shown in the Rule 131 Declaration are also much narrower than generic formula (1) with respect to the Ar variables, and Matsuura et al. disclose species within the scope of the compound required for claim 1 that have Ar groups other than those of the two compounds in the Declaration.

With respect to the rejection based on the patent application publication of Parton et al., an affidavit or declaration is inappropriate under 37 CFR 1.131(a) when the reference is claiming the same patentable invention, see MPEP § 2306. (The "same patentable invention" as used here includes inventions that are obvious over each other.) If the reference and this application are commonly owned, the reference may be disqualified as prior art by an affidavit or declaration under 37 CFR 1.130. See MPEP § 718.

Applicant's arguments regarding the date of the Parton et al. patent application publication to be overcome are persuasive. As correctly noted by applicant, the date to be overcome for the rejection under 35 U.S.C. 103(a) via 102(a) is the publication date of the reference (July 10, 2003), not the effective U.S. filing date of Parton's application (September 28, 2001).

However, applicant's arguments that the Parton et al. patent application publication does not claim the same invention as the rejected invention given the improved stability provided by bulky substituents on the naphthylene nucleus as demonstrated by the Rule 132 Declaration are not persuasive.

While the sterically bulky substituent of the present claims is not required by the claims of the Parton et al. patent application publication, Parton's claims encompass further substituents on the naphthalene compound, and sterically bulky substituents are not excluded by Parton's claim language. Parton's claim 7 requires at least one R^a group to be an alkyl or aryl group; R^a is substituted on naphthalene. It would have been within the level of ordinary skill of a worker in the art at the time of the invention to determine suitable alkyl and aryl groups. For an "aryl" group, one of ordinary skill in the art would have at once envisaged at least a phenyl group, which meets the limitations of a sterically bulky substituent as required by present independent claim 1. The present specification defines a "sterically bulky substituent" as a substituent having a Sterimol B1 value of 1.6 angstroms or greater (page 4, lines 20-21). Table A on page 5 of the specification lists a phenyl group as having a Sterimol B1 value of 1.7 angstroms. Further, the Rule 132 Declaration does not demonstrate unexpectedly superior results commensurate in scope

with the claims. The Rule 132 Declaration provides a comparison between devices having a compound similar to present formula (1) but lacking the required sterically bulky substituent (i.e. the comparison compound is a compound of formula (1) in which each of p and w is 0), and a compound of present formula (1) in which each of p and w is 1, and each of R¹ and R² is a t-butyl group. A t-butyl group is a sterically bulky substituent having a Sterimol B value of 2.59 angstroms (per page 5, Table A, of the specification). While the compound Inv-7 is within the scope of some (not all) of the present claims, none of the present claims is limited to Inv-7. The naphthalene compound of the broadest claims need only comprise one sterically bulky substituent, which may have a Sterimol B value as low as 1.6 angstroms.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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9. Any inquiry concerning this communication should be directed to Marie R. Yamnitzky at telephone number (571) 272-1531. The examiner works a flexible schedule but can generally be reached at this number from 7:00 a.m. to 3:30 p.m. Monday-Friday.

The current fax number for all official faxes is (571) 273-8300. (Unofficial faxes to be sent directly to examiner Yamnitzky can be sent to (571) 273-1531.)

/Marie R. Yamnitzky/
Primary Examiner, Art Unit 1794

MRY
February 27, 2008